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## 13 ABSTRACT

A method and furnace are described for producing a fused oxide body by decomposing a precursor compound of the oxide in a flame to form molten oxide particles and collecting those particles in a furnace constructed of a refractory material to form a fused oxide body, the improvement in the method comprising treating the refractory material with a strong acid in liquid form to react with, and thereby remove, contaminants from at least the surface of the refractory material.